

5.0 SECTION 4(f) EVALUATION

There are no changes in this section of the Final Environmental Impact Statement and Section 4(f) Evaluation (FEIS) from those presented in the *Supplement to the Draft Environmental Impact Statement and Section 4(f) Evaluation (SDEIS)*, except as noted by the use of boldface type. The changes are primarily editorial with the exception of Section 5.2 and 5.5 where additional text and coordination was added.

5.1 Description of Recommended Action

The **recommended** action is the construction of a north-south 12.5-mile multi-lane, divided highway, designated as Federal Aid Primary (FAP) Route 340, between Interstate Route 55 and Interstate Route 80. The detailed description of the project, its purpose and need are presented in Chapter 1. The alignment is shown in Exhibit 1-1. If, as currently anticipated, the Illinois State Toll Highway Authority (ISTHA) finances and constructs FAP Route 340 as a toll facility, the provisions of Section 4(f) may not be applicable. ISTHA, however, intends to construct the facility to accommodate the concerns raised in this Section 4(f) evaluation, where feasible.

5.2 Description of Section 4(f) Properties

Section 4(f) of the Department of Transportation Act of 1966 (49 U.S.C. 303) protects any publicly-owned park, recreation area, or wildlife and waterfowl refuge, or a historic site of national, state, or local significance. The Section 4(f) properties which may be affected by the FAP Route 340 project are located in the Middle Section at 135th Street and in the Northern Section from Interstate Route 55 to 127th Street and are listed here (also see Exhibit 5-1):

- Lustron House
- Black Partridge Forest Preserve
- Keepataw Forest Preserve
- Lemont Woods (**Wood Ridge**) Forest Preserve
- Centennial Trail
- Illinois and Michigan (I&M) Canal
- Lemont Centennial Park
- **Lockport Prairie Nature Preserve**

The first site is an architecturally significant historic building on 135th Street. The next three are forest preserves located along the northern upland bluff and bank of the Des Plaines River; the Centennial Trail is a recreational trail following the Des Plaines River; the I&M Canal parallels the Des Plaines River. Lemont Park District's Centennial Park is a 70 acre recreational park (a portion of the 70 acres is designated for the Lemont School District). Access to Lemont Centennial Park will be maintained, but temporary impacts associated with traffic patterns may be caused by construction activities at the interchange on 127th Street. Use of the park's tennis courts, swimming pool, softball fields, picnic area, and ancillary buildings will not be affected by FAP Route 340 and it will not be discussed further in this section. Exhibit 2-6 also shows other preserves, parks, and natural areas in the area but not affected by the highway. **Lockport Prairie Nature Preserve,**

located east of Illinois Route 53 and south of Illinois Route 7, is part of the wetland mitigation plan.

Taken together the three forest preserves listed above form a "T-shaped" forested area which extends along the northern upland bluff and river valley of the Des Plaines River. These forest preserves are physically the eastern limit of an environmentally sensitive forested area which extends along the north bank of the Des Plaines River south to Lockport. This area has been studied and its environmental merits documented by the Illinois Nature Preserves Commission as the "Sag River Valley" in 1973.

The Lockport Prairie Nature Preserve will be affected by the project but will not be "used" as that term is defined in the FHWA regulations and policies. The Preserve will be the site of wetland enhancement activities which will be "in-kind" mitigation for impacts to Wetland 43 (see discussion in Section 4.10.3.6 for a description of the enhancement activities). Although the Preserve is impacted by the project, no part of it is being acquired and the impacts will not substantially impair the purposes for which the Preserve exists. In fact the impacts are all positive and are occurring at the request of the Forest Preserve District of Will County (FPDWC) which manages the Preserve. Since there is no "use" of the Preserve as that term is defined by FHWA, the provisions of Section 4(f) do not apply.

5.2.1 Lustron House

A prefabricated, metal structure identified as a "Lustron" house is located on 135th Street in Section 6 of Homer Township (see Exhibit 5-1). The Lustron house has been determined eligible for listing on the National Register of Historic Places and a copy of the Determination of Eligibility (DOE) is included in Appendix B (under Illinois Historic Preservation Agency, letter dated February 3, 1992). The fact that it is eligible for listing makes it a Section 4(f) property.

5.2.2 Black Partridge Forest Preserve - Cook County

The Black Partridge Forest Preserve, as shown in Exhibit 5-1, consists of two parcels of land (80-acres and 355-acres) owned and maintained by the Cook County Forest Preserve District. The smaller 80-acre portion located north of Bluff Road on a bluff overlooking the Des Plaines River Valley is a dedicated Illinois Nature Preserve (January 5, 1965), called Black Partridge Nature Preserve. The edge of the highway right-of-way is approximately 350 feet west of the Black Partridge Nature Preserve along Bluff Road. This parcel has an 11-acre section that has a shelter and parking lot which are excluded from the area dedicated as a Nature Preserve. The Illinois Natural Areas Preservation Act (Ch. 105, 701-726) designates Nature Preserves and establishes the Nature Preserves Commission's purpose, authority, and policies. Section 2.12 presents a detailed description of the biological resources of the Black Partridge Nature Preserve.

Black Partridge Creek, one of the few relatively clean, spring-fed streams left in the Chicago area, flows along the northern and western boundaries of the Black Partridge Nature Preserve. The stream is fed from the sandy and gravelly Lemont Drift which overlies the local bedrock in the area. The Lemont Drift is porous and readily allows for the horizontal movement of water. This continuous seepage of clear, cold water allows the creek to maintain a flow throughout dry years. In addition to being a prime example of a spring-fed creek, it is also the home of the mottled sculpin, a

small fish which requires cold, clear water to survive. While rare in the northern Illinois area, it is not on the list of Federal or State threatened or endangered species. The creek is also home to several invertebrate species characteristic of clean, cold, spring-fed streams.

The larger 355-acre portion of the Black Partridge Forest Preserve extends south from Bluff Road to the Des Plaines River. At Bluff Road, the edge of the highway right-of-way is also approximately 350 feet west of the Black Partridge Forest Preserve. See Section 2.12 and Exhibit 2-15 for descriptions of the biological resources in the Black Partridge Forest Preserve. This parcel of land was purchased with grant aid under the Land and Water Conservation (LAWCON) Act of 1965 through the Department of the Interior. Conversions of any of this land to a use other than recreation requires the approval of the National Park Service Regional Director and the conversions are subject to restrictions under Section 6(f) of LAWCON.

The entire Cook County Forest Preserve is generally natural and undeveloped except for the picnic area in the north section of Black Partridge and some hiking trails in both portions. Vehicular access from Bluff Road is provided to Black Partridge Nature Preserve to the north but not to the southern portion of the Black Partridge Forest Preserve. An unpaved service road approximately 10 feet wide does exist below the Commonwealth Edison transmission lines in the Commonwealth Edison right-of-way which runs through the southern section of Black Partridge Forest Preserve, but it is only used by maintenance vehicles. Transmission towers are spaced about 700 feet apart across the River Valley. Activities in the forest preserve are limited to passive uses such as hiking and nature watching. Because the preserve has no full-time staff, no estimates of utilization or visitation are available.

South of Bluff Road and to the southeast of the Black Partridge Nature Preserve is Goose Lake, which is surrounded by wetlands. This area is particularly environmentally sensitive as shown by the cover type in Exhibit 2-15.

5.2.3 Keepataw Forest Preserve - Will County

The Keepataw Forest Preserve is a 215-acre preserve owned and maintained by the Forest Preserve District of Will County (FPDWC). A portion of the Keepataw Forest Preserve is dry-mesic upland oak forest. The preserve extends along the Des Plaines River Valley floor between Bluff Road and the Des Plaines River (see Exhibit 5-1), as a western continuation of the Cook County Forest Preserve. 183.53 acres of the preserve were purchased in 1977 using Federal Bureau of Outdoor Recreation (BOR) funds under the LAWCON Act. The main purposes were preserving a valuable, natural, scenic, historical site in the Des Plaines River Valley and of developing the Preserve for public nature interpretation, fishing and trail usage.

The Keepataw Forest Preserve is generally undeveloped with a few hiking trails and deer trails crossing through it. Keepataw remained undeveloped for a long period of time because of its limited access, lack of available funds, and the uncertainty of the FAP Route 340 crossing location. Construction under LAWCON funding requirements was completed in 1991 for a parking area next to Bluff Road, west of the **preferred** FAP Route 340 alignment, and limited trails through the Preserve. Fishing has been allowed at the Preserve since February 14, 1978, as per General Use Regulation Ordinance No. 124 during regular District hours. Access is gained by canoe or other small boat or through Black Partridge Forest Preserve. The hiking/nature trail and scenic overlooks

are used by local residents during normal District hours. The entire Preserve is open to other uses during regular District hours by Special Use Permit. The parking lot has restricted hours (weekdays) as a crime prevention measure, but the Preserve is used during times when the parking lot is closed. In addition, the FPDWC has proposed a regional bikeway for the Commonwealth Edison right-of-way bisecting their property. Keepataw Forest Preserve is used primarily for hiking and nature observation. No estimates of visitation are available.

Section 2.12 describes the biological resources of the Keepataw Forest Preserve. Cover types along with the location of threatened and endangered species are shown on Exhibit 2-15. Keepataw Forest Preserve has several unique qualities. Natural springs flow from a 50 foot bluff that runs directly through Keepataw. These calcareous anaerobic springs create a rare environment for plants and bacteria. The federally and state endangered Leafy Prairie Clover was identified along the westerly limits of the forest preserve (Taft, 1989). The state endangered spotted turtle is known to occur in clean, undisturbed ponds, similar to the ponds located within the wetland complex north of the Des Plaines River. Although not observed in the project area, the presence of this turtle has been recorded in adjacent areas (Stillwaugh, Jr. and Mauger, 1990). The bluff itself exposes chert, a form of quartz used by Native Americans to make various tools such as spear points and arrowheads. Remnants of a chert mine and chipping station have been documented by an archaeologist at the Will County Historical Society.

On the top of the bluff, west of the preferred alignment, are the ruins of a dozen limestone foundations, known as "Swede Town". This settlement was occupied by laborers employed by the Western Stone Company. The company was a mining operation and owned the land between 1880 and 1915. Also, in the area stands the chimney of a two-story kiln believed to be used by the company. The FPDWC also purchased a parcel immediately west of Keepataw.

5.2.4 Lemont Woods (Wood Ridge) Forest Preserve - DuPage County

The DuPage County Forest Preserve District in 1989 purchased this 190-acre parcel located just north of the Black Partridge Nature Preserve (refer to Exhibit 5-1). It forms a northeastern continuation of the forested areas which stretch along the northern bank of the Des Plaines River. A portion of this property had been cleared for farming, but the remainder is generally forested and undeveloped. No plans have been prepared to provide any recreational uses in the forest preserve and no estimates of expected use are available. No known sensitive uses or habitats exist on the forest preserve property and no threatened or endangered species are known to exist within the area. Currently the DuPage County Forest Preserve District is clearing underbrush, croplands and farm buildings as part of a savannah restoration project in Lemont Woods (**Wood Ridge Forest Preserve**).

As part of the original purchase agreement for Lemont Woods, the DuPage County Forest Preserve District agreed with the seller to allow a permanent easement on 18 acres of the Forest Preserve. This permanent easement could be used for possible future transportation uses.

5.2.5 Centennial Trail

The Centennial Trail is a 26-mile public recreational and historical trail that follows the path of the French explorers Louis Jolliet and Father Jacques Marquette between Lockport and Chicago (see Exhibit 5-1). The first of three sections of the path, from the Isle a la Cache museum in Lockport to the Will/Cook County Line, opened for public use in January 1990. The entire trail should be complete by 1995. Much of the trail is on Metropolitan Water Reclamation District property, and the Forest Preserve District of Cook, DuPage, and Will Counties are negotiating leases of these properties for trail purposes. Each County Forest Preserve District maintains the section of Centennial Trail that is located within its jurisdictional boundaries. The trail starts at Lockport on the Des Plaines River and follows the route of the Des Plaines River, the Illinois & Michigan (I&M) Canal, and the Chicago Sanitary and Ship Canal to its end at Harlem Avenue in Chicago. The trail will eventually connect with paths under development south of Joliet to run a full 90 miles through the I&M Canal National Heritage Corridor all the way to Peru, Illinois.

The trail provides access to the Isle a la Cache museum. Hikers can explore exhibits on the island's early inhabitants, including the Indians and the French explorers. The island was a favorite place for early traders to store supplies and furs during fur-trade expeditions. The site where Jolliet and Marquette were forced to remove their canoes from Mud Lake and set out on foot across the prairie is preserved near the trail in Lyons, Illinois as the Chicago Portage National Historic Site. The trail will also connect with the first lock built on the I&M Canal in Lockport and provide access to Lockport's many historic buildings, museums, and its plot of native Illinois prairie. The trail traverses the southern portions of two forest preserves in Will and Cook counties providing access to the natural areas and their additional recreational trails. Use estimates are not available for this trail.

5.2.6 Illinois and Michigan Canal

The construction of a canal to ease the passage between the Great Lakes and the Mississippi River was first suggested in a report by French explorers Louis Jolliet and Father Jacques Marquette in 1673. Over a century passed before engineers were sent to investigate the possibility of building such a canal. After much discussion, the Illinois and Michigan (I&M) Canal was built between 1836 and 1848. The I&M Canal as shown on Exhibit 5-1 now comprises a central focus of the I&M Canal National Heritage Corridor. This corridor was officially designated in 1984 by Congress as a historical resource.

Historically, the canal extended approximately 100 miles from Lake Michigan in Chicago to the Illinois River at Peru. The right-of-way was approximately 240 feet wide, varying from a minimum of 140 feet to a maximum of 775 feet wide. Of this right-of-way, approximately 60 feet was canal width and on each side were 90 feet of "reserve" lands that could not be sold.

The canal's basic dimensions, like most post-1825 canals, were 60 feet wide at surface by 36 feet wide at bottom by 6 feet deep. The towns of Ottawa, Joliet, Lockport, and Channahon had wide water areas for storage basins for boats and for a location for boats to turn around. Two earthen embankments were parallel to the canals watercourse. One carried the approximately 12 foot wide "towpath" and the other was a containment barrier called a "berm bank." Currently, the Illinois

Department of **Natural Resources** owns the canal in the Will County project area. The Village of Lemont owns the I&M Canal and reserve strip within Cook County.

According to the National Heritage Corridor Commission, most sections of the canal today are dry or only have water after a rain. There is no active boating on the canal, and it presently serves open space, wildlife habitat, recreation (walking, jogging, running, snowmobiling, bicycling, and fishing), transportation (by bicycle) and historical functions. The Village of Lemont indicates that the I&M Canal from Illinois Route 83 to immediately west of the Will County line, has water year round and is used for fishing. Boating is not presently found due to the lack of access, however, a canoe launch is proposed by the Village of Lemont.

5.3 Impacts on the Section 4(f) Properties

5.3.1 Lustron House

The preferred alignment for FAP Route 340 would directly impact the Lustron house just south of 135th Street. The historic structure is within the **required** right-of-way and thus would be displaced. Alternate alignments to avoid the Lustron house were evaluated and are discussed in Sections 3.4 and 5.4

5.3.2 Black Partridge Forest Preserve - Cook County

The **preferred** alignment will avoid direct use of the Cook County Forest Preserve lands as a result of the haul road since the **recommended** haul road will not go through the Black Partridge Forest Preserve. As a result of the bridge construction over the Des Plaines River Valley, the Commonwealth Edison transmission towers located through the Black Partridge and Keepataw Forest Preserves will be raised. Two pairs of towers will be affected on both sides of the FAP Route 340 crossing. A detailed discussion of the bridge construction is included in Section 3.5. The potential areas of construction within the Black Partridge Forest Preserve are shown on Exhibits 3-11 and 3-12. The alignment curves slightly westward as it travels north parallel to the western boundary of the Black Partridge Nature Preserve and Lemont Woods (**Wood Ridge**) Forest Preserve. The highway alignment was shifted to a ridge line north of Bluff Road to avoid direct taking of Black Partridge Nature Preserve property, as well as constructive use of the Nature Preserve. The parcel owned by the Illinois Department of Transportation (IDOT) forms a buffer zone between the **preferred** alignment and the Black Partridge Nature Preserve. Forest edge effects to the preserves, such as litter, salt spray, proliferation of disturbance-adapted species, or other factors leading to the deterioration of the forest's edge, are possible due to the proximity of FAP Route 340. The alignment approaches to within approximately 900 feet of the main channel of Black Partridge Creek at the nearest point. Of the three intermittent tributaries forming Black Partridge Creek, the northern two are directly crossed by the alignment with culverts. The southern tributary is crossed along the ridge of the subbasin.

The **required** roadway right-of-way will curve slightly westward as it travels north approximately 350 feet from the western boundary of the Black Partridge Forest Preserve (at Bluff Road). Construction in this area north of Bluff Road will occur along the western boundary of IDOT owned property and will not require use of Section 4(f) properties (see Exhibit 5-1).

Construction of the highway has potential to cause siltation in the Black Partridge Creek tributary if not controlled. These effects could degrade the high quality water systems within the creek and the uncommon stream organisms found there. First flush contaminants (salt, oil residue, debris) also have the potential to impact the native vegetation if left uncontrolled. However, provisions for stormwater management for FAP Route 340 have been included in Section 4.23.4. Short term construction effects, such as erosion and siltation, will be closely controlled to protect the water quality of Black Partridge Creek.

5.3.3 Keepataw Forest Preserve - Will County

The highway will require bridge pier construction in the eastern end of the Keepataw Forest Preserve. The actual construction in the area will require much less land area than the typical right-of-way which is generally 300 feet. To accommodate the bridge structure, permanent easements will be acquired for a width of 160 feet which will allow 15 feet outside the parapet for inspection and maintenance of the bridge structure. Temporary easements will be needed for a width of 280 feet to allow for movement of cranes and equipment during construction. Temporary and permanent easement widths vary slightly from the typical values within Keepataw in order to build an access road for the bridge construction and future maintenance (see Exhibits 3-11 and 3-12).

Approximately 3 acres will be required in Keepataw for temporary easements during construction. Estimates of land area to be required for permanent pier placement in Keepataw are 1.6 acres. Acquisition of approximately 7.8 acres of Section 4(f) property would be needed for direct access under the bridge excluding the bridge piers, plus 2.4 acres for the permanent maintenance road and access to the bridge, and an additional 0.6 acres for the energy stilling basin. Therefore, a total of 12.4 acres of Section 4(f) property will be permanently impacted. Use of the land under the bridge for construction purposes will be temporary, with revegetation required following construction. The preferred alignment will separate a section of Keepataw on the east side. This separated parcel will be approximately 15.7 acres. This area would still be accessible land, the existing recreational use of the property will not be altered.

As described in Section 3.5, two alternates are currently being investigated for the Des Plaines River Valley bridge, concrete and steel. After construction the haul road will be used by maintenance personnel to access the bridge and it will also act as a bikeway connecting the Centennial Trail and Keepataw. The bridge construction will require the relocation of two pairs of Commonwealth Edison transmission towers on both sides of the FAP Route 340 crossing.

A potential impact of FAP Route 340 in the Des Plaines River Valley is the split of the large forested tract of land formed by the Keepataw and Black Partridge Forest Preserves (Taft, 1989). Fragmentation and the creation of forest edge could disrupt the habitat of wildlife in the area, although the cover type Exhibit 2-15 shows that the River Valley is already quite fragmented. The disturbance could allow the escalation of exotic and disturbance-adapted species of plants [i.e., common buckthorn (*Rhamnus cathartica*), european highbush cranberry (*Viburnum opulus*)]. These plants could compete with and shade out native vegetation. However, maintenance of these nuisance species is **recommended** as part of the on-going highway maintenance.

Although these recreational lands in the Des Plaines River Valley are regulated by different governmental entities, the forest preserves represent a contiguous area of woodland habitat. Deer and other foraging animals have large territories and daily movement of these and other animals between the properties in search of food and water definitely occurs. In the design of the bridge over the Des Plaines River Valley, clearance will be considered under the bridge structure north of Bluff Road to allow foraging animals to move about freely.

5.3.4 Lemont Woods (Wood Ridge) Forest Preserve - DuPage County

The **recommended** highway will also lie west of the western border of the Lemont Woods Forest Preserve. By shifting the alignment west slightly, the potential for impacts to Lemont Woods is reduced. There are no expected impacts to the Lemont Woods Forest Preserve since the FAP Route 340 construction would be outside the forest preserve limits.

5.3.5 Centennial Trail and Illinois and Michigan Canal

The construction of the bridge over the Des Plaines River Valley will avoid permanent usage impacts to Centennial Trail by spanning the entire trail and not restricting human use. However, during construction the current terminus of the developed section of Centennial Trail will be relocated approximately 300 feet west from the Will/Cook County line to the western edge of the highway right-of-way. Compensatory storage for fill in the floodplain will be located in an open water area south of the Des Plaines River with two pipe culverts under Centennial Trail to allow drainage to the River. Possible future access to the FAP Route 340 bikeway could encourage and increase usage of the Centennial Trail (see bikeway discussion in Section 4.7). This connection would be a recreational benefit to Centennial Trail.

The **recommended** highway will pass over the Illinois and Michigan Canal on a bridge with a vertical clearance of approximately 80 feet. Piers supporting the bridge will be placed on the northern side of the Illinois and Michigan Canal right-of-way, approximately 15 feet or 55 feet (steel bridge alternate or concrete bridge alternate, respectively) from the edge of the actual Canal. The project will require a small portion of this property, but it will not impact the use of the Canal. The presence of the bridge may result in visual impacts.

5.4 Summary of Alternate Alignments to Avoid Section 4(f) Property Impacts

During the process of evaluating alternate alignments, various ranges of alignment shifts from the recorded centerline in the northern portion of the project area were considered to determine if impacts to Section 4(f) properties could be avoided. The Interstate Route 55 interchange location options are restricted by design and space limitations. The interchange placement is also limited by operational and safety reasons, and the proximity to the Illinois Route 53 interchange to the west and the Lemont Road interchange to the east. The ultimate issue for impact avoidance involves determining where a crossing would cause the least disturbance, thus minimizing impacts to section 4(f) property. Avoidance alternatives, including shifts in the **preferred** roadway alignment to the east and west and vertical alignment changes were considered. These options are discussed below and the constraints are shown in Exhibits 3-7 and 3-8.

Alternate Interchange Locations on Interstate Route 55

As a means of avoiding Section 4(f) property near the Des Plaines River, optional interchange locations along Interstate Route 55 were investigated. To satisfy traffic operations at Interstate Route 55, expected traffic volumes must be handled efficiently and safely. With the geometric constraints for the highway, it is physically not practicable to shift the connection point east or west of its **recommended** location at Interstate Route 355. A shift in either direction resulting in a split connection would have to be large enough to develop sufficient length to accommodate the weaving patterns that would result on the additional traffic lanes that would be needed along Interstate Route 55.

A shift to the east is not prudent nor feasible because the placement is limited by the interchange at Lemont Road (about 1.5 miles east) on Interstate Route 55, shown on Exhibit 3-7. The distance between Interstate Route 355 and Lemont Road is insufficient to provide another interchange while maintaining safe traffic operations. To cross east of Lemont Road with FAP Route 340 would destroy the continuity of the **[word deleted]** highway network, and not serve the project purpose and need of providing a continuous north-south route in the study area. A new interchange location east would be contrary to the land use plans of the local agencies.

A shift of the interchange to the west is also not prudent or feasible for similar reasons. It is not possible to effectively accommodate another interchange along Interstate Route 55 between Interstate Route 355 and Illinois Route 53. Exhibit 3-8 shows the proximity of the Illinois Route 53 interchange to Interstate Route 355 (about 2.3 miles west). Crossing west of Illinois Route 53 is not feasible due to the geometric design limits.

Alternate Alignments Shifted East

Alternate Alignment Shifted up to 0.5 Mile East

Due to geometric constraints associated with maintaining the **recommended** interchange location at Interstate Route 355, the practical limit for an eastward shift is 0.25 mile east of the Will/Cook County Line. However, as Exhibit 3-7 indicates, this limit is not feasible as avoidance since the Black Partridge Nature Preserve is directly east of the County Line and any shift to the east of less than 0.5 mile would result in direct impacts to the Nature Preserve. In addition, Lemont Woods **(renamed Wood Ridge)** Forest Preserve purchased by the DuPage County Forest Preserve District **in 1989** is contiguous on the south side with the Black Partridge Nature Preserve and extends further east. The Black Partridge Forest Preserve extends south of Bluff Road and east of the Nature Preserve encompassing numerous wetland areas along the Des Plaines River. Both of these properties would be split by an eastward shift within the limits discussed in this section.

Alternate Alignment Shifted Between 0.5 and 1.25 Miles East

An eastward shift between 0.5 and 1.25 miles would put the roadway through the environmentally sensitive Goose Lake area as indicated by biological resource studies. Several state endangered species forage within and around this lake such as heron and other water fowl.

The wetland areas of the Cook County Forest Preserve extend eastward and end in close proximity to the Lemont Road bridge in Lemont. An eastward shift avoiding the Lemont Woods (**Wood Ridge**) Forest Preserve, Goose Lake, and these wetlands is impossible within the 0.5 to 1.25 miles limit discussed in this section.

Alternate Alignment Shifted Over 1.25 Miles East

An eastward shift between 1.25 and 1.5 miles would result in a conflict with the present Lemont Road bridge crossing the Des Plaines River at the eastern boundary of Cook County's Black Partridge Forest Preserve. A shift of this magnitude would also cause traffic and residential disruption in the local area.

A shift over 1.5 miles would place the alignment at a crossing within the Village of Lemont. Bridging the Des Plaines River at this location would result in the displacement of over 60 businesses and residences on the south side of the river. This shift would result in serious community disruption. An additional eastward shift to avoid the Village of Lemont would place the River Valley crossing through the Argonne National Laboratory Reservation and other Cook County Forest Preserve lands.

Summary of Alternate Alignments Shifted East

While alignment shifts eastward to avoid Section 4(f) properties were limited to 0.25 mile by highway safety considerations, even larger shifts were investigated. Exhibit 3-7 includes constraints that indicate that an eastward shift of the alignment for total avoidance of Section 4(f) properties would not be prudent nor feasible because of the existing Lemont Road Bridge and the displacement impacts with the Village of Lemont. Shifting the alignment east over 1.5 miles would not satisfy the project's purpose and need.

Alternate Alignments Shifted West

Alternate Alignment Shifted up to 0.15 Mile West

A westward shift of up to 0.15 mile would still intersect the Keepataw Forest Preserve, but in an area that has already been disturbed by grading (see Exhibit 3-8). Environmental studies have indicated that primary habitat for the threatened and endangered species in the project area have not been found within this 0.15 mile limit discussed above.

Alternate Alignment Shifted Between 0.15 and 0.75 Mile West

Shifting the alignment between 0.15 and 0.75 mile west would place the alignment in the alkaline fen and sedge meadow/marsh complex that has been identified in this area of the Keepataw Forest Preserve (Taft, 1989). An alignment in this range would severely disturb the environmentally sensitive area that includes the state-threatened plant, *Arenaria patula*, as well as various other threatened and endangered species such as the Hine's emerald dragonfly that have been identified.

This location would also negatively affect the trails and parking lot that Will County developed as part of its Land and Water Conservation (LAWCON) requirements for Keepataw Forest Preserve. An established residential community of approximately 30 homes on the north side of Bluff Road is within the limits discussed in this Section and would be disrupted by an alignment shift between 0.15 and 0.75 mile.

Alternate Alignment Shifted Between 0.75 and 1.5 Miles West

A shift of the **preferred** alignment to the west to totally avoid use of existing Section 4(f) properties would require a movement of over 0.75 mile. This shift would avoid the Keepataw Forest Preserve west of the **preferred** alignment. However, the alignment would then be placed in property proposed for purchase by the Forest Preserve District of Will County as delineated on Exhibit 3-8 which is also known habitat for the state endangered spotted turtle. The Forest Preserve District plans to purchase this property before the construction of FAP Route 340 making avoidance of Section 4(f) property still impractical. Additional environmentally sensitive areas are encountered further west of the existing and proposed forest preserves. Veterans Memorial Woods is located less than one mile west of the Keepataw Forest Preserve.

The Land and Lakes Landfill is located between Veterans Memorial Woods and the Keepataw Forest Preserve. This landfill has historically accepted municipal solid wastes, and has monitored local soil and water conditions. Environmental reports have indicated that threatened and endangered species such as the spotted turtle have been found in these western areas. Avoidance of these areas would require a westward shift of over 1.5 miles.

South of the Des Plaines River there are various oil refineries and industries within the range discussed above. Impacts from an alignment shift would be economically disruptive and potentially cause environmental hazards with regards to chemical contaminations and public safety.

Alternate Alignment Shifted Over 1.5 Miles West

An alignment shift over 1.5 miles west would result in the highway being west of Veterans Memorial Woods and the landfill, but places the highway through or adjacent to the existing oil refineries. Displacement of a refinery would cause not only economic and industrial disruption resulting in employment hardships, but also could have environmental concerns related to on-site hazardous waste storage areas and wastewater treatment facilities. The industrial corridor in the Des Plaines River Valley contains large factory buildings that would be difficult to avoid as well as expensive to relocate, plus there would be potential for hazardous waste sites there too. An alignment west of Veterans Memorial Woods would also pass near Romeoville Prairie Nature

Preserve. A suitable crossing of the Des Plaines River could not be found north of 135th Street. This crossing location would prevent Lemont from having access to the project as well as being contrary to land use planning being done by local agencies.

Summary of Alternate Alignments Shifted West

Shifting the alignment more than 0.15 mile to the west to avoid existing and proposed Section 4(f) properties appears not to be prudent nor feasible because of the heavy industry in the area, the increased potential for encountering hazardous waste materials and increased potential for encountering environmentally sensitive areas. Exhibit 3-8 shows the significant features involved with western alignment shifts. If the alignment was shifted too far to the west, it would not be possible to satisfy the purpose of the project.

Since the previous discussion indicated no prudent or feasible alignment options to avoid the use of all Section 4(f) properties, the preferred alignment will involve the location with the least disturbance. Based on the environmental analyses, an alternate alignment shift up to 0.15 mile west would be feasible. Within this allowable range, the least impact alignment is that which was shifted 350 ft. west of the recorded alignment. This alignment crosses over a ridge near Bluff Road. The "ridge alignment" utilizes the natural drainage divide to maintain existing drainage flow. This alignment also does not touch the Black Partridge Nature Preserve, while crossing the Keepataw Forest Preserve at an optimal location since it is not a primary habitat for threatened and endangered species and the area has previously been disturbed for grading. This alignment is discussed in Section 3.3.3 as Alternate N-2A.

Alternate Alignments to Avoid the Lustron House

As an architecturally significant historic building, the Lustron house located on 135th Street in the Middle Section qualifies as a Section 4(f) property (see Exhibit 5-1). After coordination with the Illinois State Historic Preservation Office, it was determined that the structure would be adversely affected by FAP Route 340 unless the alignment was shifted enough to maintain the existing tree lines as a buffer. In evaluating various alternate alignments to avoid the Lustron house, shifts to the east and west were examined. Constraints that limit potential shifts include the proximity to Gordon Lane, existing residential locations, local businesses, and the interchange geometrics at 143rd Street and Illinois Route 171 (Archer Avenue). Minor shifts to avoid the Lustron house, but not the tree buffer were not feasible since visual effects from FAP Route 340 would still require mitigation for the adverse effect.

Shifting the alignment east would displace approximately 15 additional houses in the Cache Lake Subdivision, residences along Gordon Lane, and homes near 139th Street. Interchange operations would also be complicated by the sharp skew angle at Illinois Route 171. Residential density increases toward the east with older, established neighborhoods near Coke Road and newer houses built east of Gordon Lane. Several businesses are also located along Illinois Route 171 about one-half mile east of the recorded alignment.

West of the Lustron house, development is occurring north of 135th Street and also along Illinois Route 171. A western shift to keep the existing tree buffer could encroach upon these developing areas. The Homer Tree Service on Illinois Route 171 would also be relocated. Going further west

reduces the distance between 143rd Street and Illinois Route 171, creating complex traffic operations associated with an interchange between these two crossroads.

5.5 Measures to Minimize Impacts

Measures to minimize impacts to the use of Section 4(f) properties include a high level bridge which would cross from south of New Avenue to approximately 700 feet north of Bluff Road spanning three waterways, two railroad lines, access roads, wetlands and forest preserves. The Des Plaines River Valley bridge proposal was developed to minimize impacts to the wildlife and vegetation in the area and preserve it for continued recreational use. Span lengths were increased to minimize the "foot print" of the bridge, reducing ground disturbance. The bridge would be built to accommodate the ultimate design of three lanes in each direction to avoid disturbing the environmentally sensitive area a second time in the future. The pier placement will allow continued unrestricted wildlife movement through the area while avoiding the dangers of wildlife/auto collisions on the roadway. The bridge construction also avoids filling of the large areas of wetlands that would be required for the construction of a roadway at grade level. Deck and related highway drainage will be directed away from sensitive areas.

Measures to control erosion and siltation will be used throughout the construction of FAP Route 340 as required in Article 107.23 of ISTHA Standard Specifications. In the Northern Section, north of Bluff Road, an erosion control fence will be installed along the eastern right-of-way prior to construction. A separate ditch will be created inside the erosion control fence to collect the stormwater sheet flow and minimize siltation in the Black Partridge Creek. Since construction activities have the potential to introduce additional sediment into the overland drainage patterns, other special provisions requiring erosion control, such as those found in "Procedures and Standards for Urban Soil Erosion and Sedimentation Control in Illinois" will be used. The contractor will be required to develop an erosion control plan in accordance with the National Pollutant Discharge Elimination System (NPDES) standards. These guidelines will reduce the sedimentation.

Since Land and Water Conservation (LAWCON) funds were involved, Section 6(f) property converted for the preferred alignment must be replaced with property of at least equal market value and similar utility. Details of the replacement mitigation will be agreed upon through coordination with the **Forest Preserve District of Will County (FPDWC)**, **Illinois Department of Natural Resources (IDNR)**, and **Illinois State Toll Highway Authority (ISTHA)**. The U.S. Department of the Interior - National Park Service needs to approve the Section 6(f) LAWCON replacement property for the land converted from the Keepataw Forest Preserve. A Conversion Request **[phrase deleted]** was prepared for use in coordination with the National Park Service (**See Appendix B under US Department of Interior**).

The following is a description of the process for establishing appropriate mitigation for the use of Section 6(f) properties. First, the total converted acreage of Section 6(f) land in the Keepataw Forest Preserve will be determined. This analysis shall take into consideration the actual permanent easement limits, any orphaned parcels that may be created, necessary air rights, and the land area use impacted by excessive noise levels. The area required for permanent easement has been calculated to be 12.4 acres which includes pier placement, direct access under the bridge, the maintenance road, and the energy stilling basin. Air rights associated with the bridge are also incorporated into the acreage for permanent easement.

Options for replacement lands exist in the project area. The FPDWC identified four possible mitigation sites, two primary and two secondary, for mitigating the conversion of Section 4(f) and 6(f) property in the Keepataw Forest Preserve. The primary sites were initially considered. The first parcel (approximately 38.9 acres) is adjacent to the west edge of the Keepataw Forest Preserve, south of the Commonwealth Edison property. The location would offer protection of existing wetlands with potential for enhancement and recreation. Protection of a state endangered spotted turtle population site would also occur. The second parcel (approximately 29 acres) is located south of 167th Street (Division Street), north of Dellwood Park, and between the Chicago Sanitary and Ship Canal and the Illinois and Michigan Canal. This location protects an Illinois Natural Area Inventory site, wetlands, and habitat for the federally and state endangered Leafy Prairie Clover. It is also adjacent to existing open space purchased by the Lockport Township Park District with LAWCON funds. Based on the Illinois State Geological Survey's Preliminary Environmental Site Assessment Report for the two parcels, the first parcel was reduced to 30 acres for purchasing consideration. After further coordination with the FPDWC, the first site was determined to be undesirable due to the altered environmental condition of the property as a result of quarrying activities. However, the second replacement property was deemed acceptable by the FPDWC.

Next, the two secondary sites were evaluated. These sites (38.6 and 31.6 acres) are located near Rock Lake along Joliet Road and Illinois Route 53 in the Romeoville area. Initial Site Assessments conducted at these locations identified potential hazardous waste materials that would require further investigations. Therefore, the two secondary sites were eliminated from consideration as Section 6(f) conversion replacement property, because of the risk involved.

[sentences deleted] ISTHA requires a permanent easement of approximately 12.4 acres and a temporary easement of approximately 3 additional acres in land located in the Keepataw Forest Preserve for use in connection with FAP Route 340. This property has been appraised at \$6,000 per acre. This land was originally purchased with LAWCON funds. As substitution for this property ISTHA will provide what has been commonly referred to as the "Lockport Prairie East" site. This property was appraised at \$365,000 and is approximately 29 acres in size. The August 9, 1995 agreement between ISTHA and FPDWC is included in Appendix B under Will County Forest Preserve District. A letter dated February 1, 1996 from the Department of Interior grants a conditional approval for the Section 6(f) conversion request and is included in Appendix B under US Department of Interior. The final approval will be included in the FAP Route 340 Record of Decision (ROD).

5.5.1 Lustron House

Avoidance of this architecturally significant structure was not found to be feasible and prudent. In consultation with the Illinois State Historic Preservation Office (ISHPO), a mitigation plan to minimize the project impacts to the structure was formulated. The structure will be recorded according to Historic American Building Survey standards and a plan will be formulated to market and move the structure to a setting which is deemed suitable by the ISHPO. A Memorandum of Agreement (Appendix B **under Illinois Historic Preservation Agency**) has been drafted in an effort to formalize this mitigation treatment and fulfills all requirements pursuant to 36 CFR Part 800, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f).

5.5.2 Black Partridge Forest Preserve - Cook County

Measures to control erosion and siltation will be used throughout the construction of FAP Route 340. Due to the shift in alignment from the recorded centerline (see Exhibit 5-1), the **recommended** FAP Route 340 would not touch the western boundary of the Black Partridge Nature Preserve. Groundwater monitoring wells were installed in Spring, 1991 by the Illinois State Geological Survey, to identify and monitor the quantity of the groundwater in the area. The shift provides a visual and physical buffer between the limits of construction and the forest preserves. No permanent structures, haul roads, or temporary easements will be required from Black Partridge Nature Preserve. Runoff from the alignment will be drained to a tributary west of the Nature Preserve. Runoff from the Des Plaines River bridge will be conveyed to the Des Plaines River, after first going through an energy stilling basin to minimize the heavy concentration of contaminants from entering the local surface water regime. Construction activity along the Commonwealth Edison right-of-way road will be limited to the areas shown on Exhibits 3-11 and 3-12 and will utilize the haul road, not the Commonwealth Edison service road to minimize disturbance of the Goose Lake heron rookery near Goose Lake.

A benefit of the project is the purchase of the Bluff Oaks Estates development which is north of Bluff Road near Black Partridge Nature Preserve. Because of the purchase, part of this land will remain forested and **act [word deleted]** as a buffer, rather than being clear cut and developed. Flora and fauna will remain, and continuity within the area will be maintained.

5.5.3 Keepataw Forest Preserve - Will County

The Des Plaines River bridge will also span the Keepataw Forest Preserve. The only use of the property would consist of piers for bridge support and an area for construction and maintenance purposes. Construction and maintenance activities will be restricted to the immediate area to minimize negative impacts. Measures to minimize construction impacts include; the use of temporary "No Intrusion" fences to delineate limits of access and installation of silt fences to control erosion. A herpetologist will be employed to determine if the primary range of the spotted turtle and Blandings turtle is outside the construction limits before construction begins. If spotted turtles are found within the construction limits, then appropriate action would be taken based on the herpetologist's recommendations. In addition, a biologist, botanist, and ornithologist will be retained by ISTHA to observe construction startup activities adjacent to and within local forest preserves. The scientists will visit the site periodically and report all findings directly to ISTHA. Water quality impacts from the highway into the forest preserve would be minimized through the installation of a piped drainage system below the haul road that would carry the stormwater directly to the Des Plaines River. The extension of the bridge northward towards Davey Road prevents an added amount of stormwater runoff from entering into the local drainage patterns. Also, the bridge spans north of Bluff Road allow migration of animals to continue.

5.5.4 Lemont Woods (Wood Ridge) Forest Preserve - DuPage County

No permanent structures, haul roads, or temporary easements will be required. Construction vehicles and equipment will be prohibited from Lemont Woods.

5.5.5 Centennial Trail and Illinois and Michigan Canal

Alternative pier locations were considered near the Illinois and Michigan Canal to avoid taking the Section 4(f) property. However, given the existing land uses for adjacent property and span length limitations, no prudent or feasible alternatives were found. The Illinois and Michigan Canal right-of-way is about 240 feet wide, while the Atchison, Topeka, and Santa Fe Railroad maintains railroad tracks on the adjacent 80 feet of property to the north. This entire distance could not be spanned; to minimize impacts to the Section 4(f) property, the piers are located as far north as possible without interfering with the railroad operations. A finding of no adverse effect was determined by the Illinois Historic Preservation Agency, see letter dated November 29, 1993 in Appendix B for documentation (under LAWCON). The pier placement will allow continued use of the canal by canoes or other recreational crafts. During construction, a temporary bridge may be used to cross the Illinois and Michigan Canal, if needed.

Permanent disturbance of the newly developed Centennial Trail along the Des Plaines River is avoided by spanning the path. A low level bridge over the Des Plaines River will be used for construction and then left in place for use as both a maintenance road and a bikeway.

5.6 Coordination

Based upon the above considerations, there is no feasible and prudent alternative to the use of land from the Keepataw Forest Preserve, the Illinois and Michigan Canal, and the Lustron House, and the **recommended** action includes all possible planning to minimize harm to the Keepataw Forest Preserve, the Illinois and Michigan Canal, and the Lustron House resulting from such use.

5.6.1 Forest Preserve District of Cook County

Coordination with the Forest Preserve District of Cook County has continued since 1987 when the FAP Route 340 project studies were resumed. Through coordination the alternate alignment that is **recommended** was developed to avoid use of the Black Partridge Nature Preserve. The Forest Preserve District of Cook County identified the unique environmental features of Black Partridge Nature Preserve on August 1, 1988. They requested that the highway alignment be moved as far westward as possible. On November 3, 1989 the Forest Preserve District reemphasized their prime concern of protecting the watershed of Black Partridge Creek. Their April 25, 1990 letter suggested mitigation measures to minimize surface and subsurface drainage from the highway including shifting the alignment west, using an enclosed drainage system, installing barriers, and transferring vacated state owned lands to the Forest Preserve District of Will County as a buffer area. A western alignment shift was developed in response to the Forest Preserve District of Cook County's concerns.

A meeting was held on December 13, 1990 with the Illinois State Water Survey and the Illinois State Geological Survey to discuss water quality impacts to Black Partridge Creek and associated Section 4(f) areas. Two primary issues were discussed:

- Changes in the water quality and quantity of Black Partridge Creek from FAP Route 340.

- Possible compression of soils supplying ground water to the springs located in the Keepataw Forest Preserve and the Black Partridge Forest Preserve.

In response to these hydrogeological concerns, the Illinois State Geological Survey conducted studies and published the report: *Predicted Impacts of a New Highway on a Spring-fed Wetland*, June 4, 1992. According to the report, shifting FAP Route 340 to the ridge and allowing infiltration would minimize the impact of the highway on discharge at the spring. Overall reduction in discharge is expected to be minimal.

At a meeting on January 31, 1995 the Forest Preserve District of Cook County indicated that they did not wish to have the haul road constructed through the Black Partridge Forest Preserve since that particular section would not necessarily be needed to build the mainline bridge. They also mentioned that they do not want to participate in the bikeway plan, but they may decide to pursue a bike trail at a later time as a separate project which could have fewer environmental impacts. The Forest Preserve District of Cook County's comments to the *Supplement to the Draft Environmental Impact Statement and Section 4(f) Evaluation (SDEIS)* are included in Appendix A.

5.6.2 Forest Preserve District of Will County

Coordination with the Forest Preserve District of Will County (FPDWC) has continued since early 1987 when studies of the highway construction were resumed. Access to the Keepataw Forest Preserve is currently limited, but required by the Land and Water Conservation Act (LAWCON). The FPDWC implemented an access and recreational improvement plan for Keepataw in 1991 that includes a gravel parking lot and short trails.

The FPDWC expressed interest in preserving the water resources in the Keepataw Forest Preserve and would like the **recommended** bridge that will cross the preserve to include an enclosed drainage system. The bridge has been designed with a surface collection system that has downspouts at every pier. A storm drainage pipe will be constructed under the access road to convey the stormwater from the piers, through a stilling basin, to the Des Plaines River. At the base of each pier a structure will separate low flows from any excess flows which will be allowed to overflow into the adjacent wetlands. A groundwater monitoring program has identified and monitored movement and quality of groundwater in the area.

In February, 1991, the FPDWC restated that they will not endorse western shifts near Keepataw Forest Preserve until additional field studies were completed. FPDWC stressed the cultural and environmental significance of the area. IDOT prepared a *Draft Biological Assessment* for the Des Plaines River Valley in the fall of 1992. This report thoroughly investigated the environmental habitat in the various Section 4(f) properties, looking for critical habitat for threatened and endangered species.

The FPDWC expressed concern about existing uncontrolled runoff north of Bluff Road; the accelerating erosion occurring in ravines upslope from the most sensitive areas near Black Partridge Nature Preserve; and the possibility of construction impacts from FAP Route 340. Edge effects from FAP Route 340 were also mentioned as a concern. FPDWC stated the need to protect the unique environmental and historical aspects of Keepataw Forest Preserve. An additional concern was the FPDWC opposition to any lowering of the grade on Bluff Road.

In response to a possible alignment shift westward of up to 0.25 mile, on February 14, 1991, the Board of Commissioners of FPDWC passed Resolution #91-8. The resolution requested IDOT to abandon further considerations for alignment shifts in northern Will County and in the Keepataw Forest Preserve based on impacts associated with a 0.25 mile alignment shift. The resolution requested that FAP 340 remain within the originally recorded centerline, and that all necessary environmental assessment studies be undertaken to minimize and mitigate adverse impacts to this area. The resolution requested IDOT to appropriately replace or mitigate LAWCON lands, wetlands, cultural, and biological resources which are lost or degraded as a result of FAP Route 340. Lastly, the resolution requested IDOT to implement construction techniques which will minimize environmental impacts.

IDOT concurred with FPDWC that the 0.25 mile shift has negative environmental impacts. IDOT **recommended** a revised shifted alignment 350 feet west of the originally recorded alignment, and stated that this new location minimizes adverse impacts. Also, IDOT stated their intention to pursue protective buying of the Bluff Oaks Estates parcel and to study an enclosed drainage design capable of handling the "first flush".

IDOT concurred with FPDWC's position on appropriate mitigation and replacement of lands along with the reduction of future or post construction impacts to Keepataw Forest Preserve. IDOT acknowledged receipt of resolution #91-8, the negative impacts of the 0.25 mile shift, and supported the 350 foot shifted alignment.

The FPDWC outlined and suggested potentially acceptable mitigation sites for loss of LAWCON property, impacts to the preserve and wetlands on July 1, 1991. On September 20, 1993 the FPDWC reaffirmed their desire to accept LAWCON replacement land located immediately west of and contiguous to the Keepataw Forest Preserve. The FPDWC expressed concern about salt spray and debris from the bridge over Keepataw Forest Preserve. Bluff Road was discussed in terms of access to Keepataw. Current environmental studies were mentioned, and the need for additional studies for and along the shifted alignment were discussed. IDOT agreed to undertake additional environmental studies to determine the biological and ecological character of the area (included in the *Draft Biological Assessment*). FPDWC also offered their support for the preferred alignment south of the River Valley.

Extensive coordination has taken place with the FPDWC relative to impacts to Section 6(f) property conversion in Keepataw and the mitigation process. The FPDWC's letter dated March 9, 1995 addresses their concerns for properly calculating the converted acreage. They also confirmed that the replacement land must be of at least equal fair market value and size to the converted property. **In a August 10, 1995 letter the FPDWC rescinded their desire to accept land contiguous to Keepataw Forest Preserve and accepted "Lockport Prairie East" as LAWCON replacement land.** The FPDWC's comments to the *SDEIS* are included in Appendix A.

5.6.3 Forest Preserve District of DuPage County

Because of the 1989 acquisition of the Lemont Woods (**Wood Ridge**) Forest Preserve property by the Forest Preserve District of DuPage County, there is only a short history of coordination regarding the FAP Route 340 project. The Forest Preserve District of DuPage County has not

voiced opposition to the proximity of the alignment to their property. The Forest Preserve District was approached about the possibility of allowing the construction of wetlands for mitigation within Lemont Woods. In a February 5, 1990 letter they felt this construction was unlikely because of the terrain of the preserve property.

5.6.4 Illinois Nature Preserves Commission

Early in the project the Illinois Nature Preserves Commission (INPC) expressed concern about the proximity of FAP Route 340 to Black Partridge Nature Preserve in a letter on July 31, 1987. They suggested moving the alignment west in the northern section.

Representatives from IDOT attended a May 3, 1990 meeting of the Illinois Nature Preserves Commission. During the meeting, IDOT presented the project and two possible alternate alignments in the northern section: along the Nature Preserve boundary, and an alternate route 0.25 mile west of the Nature Preserve. The Nature Preserves Commission expressed support for the proposed alignment 0.25 mile west of the western boundary of Black Partridge Nature Preserve (Resolution #1046) at this meeting.

After additional studies had been conducted, the INPC recognized in an October 18, 1990 letter that a 0.25 mile shift would place the **recommended** highway through sensitive habitats.

On May 9, 1991 a meeting was held in Springfield so the Illinois Nature Preserves Commission (INPC) and the Illinois Department of Conservation (IDOC, **now Illinois Department of Natural Resources, IDNR**) could express concerns about the project. Both agencies agreed that IDOT has thoroughly investigated the environmental and cultural resources in the project area. The agencies also agreed that IDOT has thoroughly evaluated alignment options and impacts from construction of FAP Route 340. The INPC noted that the environmental and cultural studies indicate that the Keepataw Forest Preserve represents potential Nature Preserve quality lands. The INPC also noted that the alignment selected is the best one available for the project within the corridor studied. However, it is possible that no alignment will remove all doubt that FAP Route 340 would not adversely impact the area and its rare, threatened, and endangered components.

The INPC submitted comments to the *SDEIS* which are included in Appendix A.

5.6.5 Field Review

An environmental coordination field review was held on March 15 and 16, 1990. Representatives from various agencies including Illinois Environmental Protection Agency (IEPA), Illinois Nature Preserves Commission (INPC), the Illinois Natural History Survey (INHS), the Forest Preserve Districts of Cook County and Will County, U.S. EPA, U.S. Fish and Wildlife Service (FWS), Army Corps of Engineers (COE), and the Soil Conservation Service (SCS).

The field review began at the north end of the project corridor and proceeded south, reviewing areas of environmental concerns. The main area of concern was the Black Partridge Nature Preserve and the project impacts to aesthetics, creation of vegetative edge, noise and water quality. A suggestion was made to isolate "first flush" drainage from the roadway away from Black Partridge Creek but to allow heavy storms to overflow into the Black Partridge watershed. A ditch liner was considered to limit infiltration of potential pollutants into the preserve. The report, *Predicted Impacts of a New Highway on a Spring-fed Wetland* (June 4, 1992), showed that infiltration of potential pollutants would be minimal.

A second field review (March 29, 1990) was attended by representatives from the **IDNR**, the INPC and the Forest Preserve Districts of Cook County and Will County. This meeting was held to review the possibility of moving the roadway alignment to as much as approximately 0.25 mile further west of the Black Partridge Forest Preserve to avoid sedimentation and other water quality impacts to the area.

A field meeting was held on October 25, 1993 to explore the possibility of utilizing an existing and abandoned pathway through Black Partridge Forest Preserve and Keepataw Forest Preserve for construction access to the Des Plaines River Valley bridge.

Another field review was considered after the *Draft Environmental Impact Statement and Section 4(f) Evaluation (DEIS)* was issued, but prior to the Public Hearing. However, the various review agencies did not express an interest in attending another field review at that time.